

BoR (24) 84

BEREC Report on the outcome of the public consultation on the draft BEREC Report on the general authorisation and related frameworks for international submarine connectivity

6 June 2024

Contents

Introduction		2
1.	General overview of the draft report	4
2.	Comments on submarine cable systems	4
3.	Comments on the scope of electronic communications regulatory framework	7
4.	Comments on measures to promote submarine connectivity	9

Introduction

The Board of Regulators adopted the <u>draft report on the general authorisation and related</u> <u>framework for international submarine connectivity</u> (the "draft report") for public consultation at the 57th BEREC Plenary meeting (7 December 2023).

With this report, BEREC aims to clarify the general authorisation and related frameworks applicable to international submarine connectivity and to identify possible solutions to promote investment in this sector and to strengthen the European Union's geostrategic position.

For this purpose, this report:

- 1. Briefly describes the activities involved in the deployment and operation of submarine cable systems (**Section 2**);
- Outlines the applicability of the electronic communications regulatory framework to international submarine cable systems and the powers and experience of national regulatory authorities in this field (Section 3);
- 3. Identifies other national administrative authorisation procedures applicable to international submarine cable systems (**Section 4**);
- 4. Gathers information on initiatives taken at European and national level to promote international submarine connectivity (**Section 5**).

From 14 December 2023 until 31 January 2024, stakeholders were invited to comment on any of the material presented in the draft report.

BEREC received 10 contributions from the following stakeholders (listed in the order in which they were received):

- 1. Meta;
- 2. Global Digital Inclusion Partnership (GDIP);
- 3. European Competitive Telecommunications Association (ECTA);
- 4. 4iG Plc. (4iG);
- 5. Microsoft;
- 6. Google;
- 7. Amazon Web Services (AWS);
- 8. Nokia;
- 9. European Subsea Cables Association (ESCA); and
- 10. European Telecommunications Network Operators' Association (ETNO).

This report assesses and summarises their contributions.

BEREC appreciates the willingness of the stakeholders to engage in this project and would like to thank all respondents that offered their valuable insights on the draft report.

The following sections describe the comments, observations and recommendations received during the public consultation and summarise BEREC's brief assessment and response:

- Section 1 refers to the stakeholders' general overview of the draft report;
- Section 2 refers to the comments received on submarine cable systems, namely on submarine cable activities, technological trends and ownership and operation structures;
- **Section 3** refers to the comments received on the scope of the electronic communications regulatory framework; and
- Section 4 sets out an overview of stakeholder views on measures to promote submarine connectivity.

1. General overview of the draft report

Generally, all responses of the stakeholders were supportive of the draft report.

ESCA considered to be encouraging that there is a focus on submarine cables amongst the NRAs community in Europe **and**, given the critical importance of submarine cables to the global Internet, and to the countries and communities they connect, **GOOGLE** strongly supported the stated goal of the BEREC draft report to promote investment in this sector.

META commended BEREC for bringing together a wide range of policy and regulatory issues relevant to the development of submarine cable systems in Europe. The draft report, in Meta's view, is a cogent and thorough examination of these issues, draws on wide consultation with regulatory and industry stakeholders and finds valuable conclusions on this vital element of digital infrastructure. Meta also stresses that investing in foundational infrastructure such as subsea cables is crucial to connect billions of people using Meta's family of apps.

MICROSOFT appreciated BEREC's holistic approach on the general authorisation and related frameworks for international submarine connectivity and emphasised that a strong and secure connectivity will be best achieved by a regime that maximally promotes investment in submarine cable infrastructure and flexible deployment of its landing zones.

BEREC's assessment and response

BEREC acknowledges the positive feedback from stakeholders on the draft report.

2. Comments on submarine cable systems

With regard to the **submarine cable activities** listed in the draft report, **ESCA** understands that the earlier project planning (prior to marine survey activities), feasibility, and desktop study phases can also be considered when looking at better regulation and policy development relating to submarine cables. In fact, decisions on route planning, feasibility and incentive/disincentive to land or route a cable are taken at an early stage before survey activities are planned, and this could be supported through well-coordinated agencies to engage with directly early in project planning. Throughout the industry this is often known to be an uncoordinated exercise involving multiple agencies, many of which have no direct involvement or knowledge of submarine cables.

BEREC's assessment and response

BEREC agrees on the relevance of the research and planning as an important stage prior to the specific activities involved in the deployment of submarine cable systems, hence has changed Subsection 2.1 accordingly.

In relation to **investment and technological trends**, **AWS** mentioned that, between 2017 and 2022, it invested in Europe more than €21 billion in cloud and edge infrastructure (direct capital and operational). AWS regularly invests in new subsea routes to ensure that customers' experience is stable, and to ensure a low latency and high availability connectivity when using the AWS backbone network.

ESCA considers that the assessment made in this subsection on technological trends is somewhat limited and could be enhanced to cover fibre sensing and other future capacity-building technologies.

GOOGLE considered that the significant investment that technology companies have made in submarine cable technology, not just in the cables themselves, is not sufficiently addressed in the draft report, and provided the following examples:

- With the Dunant cable, Google introduced an advanced Spatial Division Multiplexing (SDM) design. SDM technology has made it possible to transmit a record throughput of 250 terabits per second across oceans - enough to transmit all the Library of Congress's digitized information three times per second. While previous submarine cable technologies relied on a dedicated set of pump lasers to amplify each fiber pair, Dunant's SDM technology enabled the distribution of pump lasers and associated optical components across multiple fiber pairs. This "pump sharing" technology enabled an increased number of fibers in the cable as well as increased system availability;
- With Equiano, Google introduced important new features that enable optical switching at the fiber pair level instead of the traditional wavelength-level switching approach. This greatly simplifies the allocation of cable capacity and gives operators the ability to add and redistribute it to different locations as needed. In another European cable, Grace Hopper, Google presented an evolution of the same technology that offers more configuration options and therefore more flexibility and resilience;
- Recently, Google began implementing multicore fiber optic (MCF) technology, starting with the Taiwan-Philippines-USA (TPU) cable. MCF is based on the current generation of single-core optical fibers, which use a rounded glass core surrounded by a glass cladding to confine and distribute light. MCF allows the number of strands in the cladding to be doubled, meaning a single strand of fiber can carry more light and information at a lower cost per bit. MCF technology also enables faster production, testing and maintenance because it uses fewer fibers compared to an equivalent number of cores implemented with traditional single core fibers. These continued investments in technological advancement and collaboration with submarine cable suppliers have advanced the entire submarine cable industry. Furthermore, the resulting improvements in network speed, resilience and reliability will benefit all subsequent data users, including European citizens, businesses and governments.

BEREC's assessment and response

BEREC agrees with the relevance of the technological advancements and has clarified Subsection 2.2.2 accordingly. However, it should be noted that the aim of this Subsection is to provide a general overview on this topic.

Regarding the subsection on <u>ownership and operation structures</u>, **ESCA** considers that the changing model of ownership structures of subsea cables is well recognised within the industry, however there are some nuances to highlight as the draft report does not quite reflect the reality in all cases. OTTs have often become major system investors and leaders of new build projects, rather than single owner entities, which could be concluded upon reading the report. Generally, there are partnerships to facilitate the complex ownership structure and operation within countries where submarine cables land.

Also, in **GOOGLE**'S view, the diverse ecosystem of co-investment and partnerships that has evolved as the participation of technology companies has increased is not sufficiently addressed in the draft report. Indeed, Google's experience with submarine cables in Europe exemplified and elsewhere, as per examples provided in this stakeholder's contribution, has often been different from what is concluded in the draft report on the matter, with most investments reflecting a diverse ecosystem of co-investment and partnership.

According to **META**'s experience, the ownership models currently within the market are more comprehensive and/or complex. Single ownership is not the predominant model for submarine systems, being most EU international connectivity based on a multiple ownership model, where ownership and use of connectivity infrastructure are shared between content and application providers (CAPs), telcos and other private investors. The multiple ownership model remains active and relevant with some of Europe's newest and most technically advanced systems using this model (for instance, Amitie, 2Africa, Havfue/AEC2). Even where deployed, single ownership is not necessarily a persistent model, with owners subsequently opening up the system to other networks. The model is attractive because it allows a single developer to simplify and speed construction and deployment. Consortium formation and shared funding arrangements are not required. Having built the systems, single owners will sell long term ownership interests (i.e. fibre IRUs) in the system to telcos, CAPs and other investors. In practice, the system becomes a multiple ownership model.

Furthermore, Meta also mentioned that BEREC appears to equate "CAP driven" with its concept of single ownership, which in Meta's view is incorrect. The majority of CAP investment in submarine cable systems is currently deployed through multi-ownership models. In these shared ownership systems, investment decisions and system governance are decided by multiple owners in proportion to each owner's investment.

Finally and in the same sense, **NOKIA** indicated that large CAPs are mostly investing in submarine cables jointly with traditional electronic communications network (ECN) providers.

BEREC's assessment and response

BEREC has taken into consideration the information provided by the stakeholders and has clarified and amended Subsection 2.2.3 accordingly.

However, BEREC notes that:

a) the increasing relevance of single ownership structures, as initially mentioned in the draft report, relates both to structures with and without partnerships, as has now been clarified in Subsection 2.2.3;

b) the aim of this subsection is to offer a general overview on the existing ownership and operation structures to which the regulatory framework may be applicable.

3. Comments on the scope of electronic communications regulatory framework

With regards to the (lack of) definition of **publicly available electronic communications services**, **4iG** noted that the definitions of public ECN and publicly available ECS play a crucial role in determining the regime applicable to each network or service, as most of the rights and obligations set out in the EECC apply only to public ECN and publicly available ECS. 4iG further considers that a clear definition of publicly available ECS is essential for any future European legislative and financial initiative concerning investment in electronic communications services and networks, including the deployment of submarine communications cables.

In the brief "Good Practices for Subsea Cables Policy: Investing in Digital Inclusion" shared by **GDIP** and supported by Meta is recommended that policymakers should not treat private networks as a telecom operator. A private network operator does not provide transmission capacity or services to customers but instead uses the private network for its own purposes, such as to reduce latency of its services, which in turn improves the user experience for consumers and enables more efficient delivery of traffic by local telecom operators to consumers. Because these networks are not providing traditional telecommunication services to any companies or consumers, or participating in any market for these services, regulations applicable to public networks are not appropriate for private networks. Private network operators should be able to own and operate their own fiber under an exemption to telecoms licensing requirements, both within the country and even for terminating a subsea cable in a country, provided it is always for private use, as is the current practice under EU law. Private network operators are unlikely to land in countries where they are regulated like a traditional telecom company selling telecom services to third parties or consumers.

GOOGLE also highlights that the clarity and harmonisation in the interpretation of these critical definitions could help to mitigate regulatory uncertainty and bring more investment into the industry. Google urged preservation of this important distinction between providing network services to the public in a particular jurisdiction, and self-provisioning of network services

(including between affiliates). Regulatory obligations should continue to apply to the service level when a provider intersects with the public. This is the point at which the public interest becomes most significantly implicated, supporting more robust regulatory oversight. Earlier in the supply chain, and where network services are not offered to the public in a particular jurisdiction, more limited obligations, such as technical, health and safety and environmental standards compliance and reporting, are more appropriate.

BEREC's assessment and response

BEREC acknowledges the overall agreement regarding the importance of the definition of publicly available ECS and the lack of a robust harmonisation in this definition – where it exists – and in the interpretation of what qualifies as a publicly available ECS, as mentioned in Subsection 3.3, and stresses the views presented by stakeholders that such a context may cause regulatory uncertainty to a level that could hinder investment in the business of submarine cable systems.

With regards to the **scope of the ECNS regulatory framework**, **ECTA** pointed out that it should be explicitly included in the final Report that it is clear for all involved that EU Member States and EEA countries apply, at least since the national transposition of the 2002 EU Directives, what is consensually considered as being best world-wide international practices relating to the authorisation of international submarine connectivity, and that this is attributable principally to the fact that the EU's regulatory framework's general authorisation principle for ECN and ECS applies unequivocally to all ECN and ECS, including to the operation (and related rights and obligations) of submarine cables, landing stations, among others. Furthermore, ECTA indicated that BEREC's draft Report usefully confirms that the general authorisation principle (with notification obligations, where applicable, based on Member States' national regulation) governs international submarine connectivity in the EU.

Thus, **ECTA** urged BEREC to exercise caution in the Final Report and/or in follow-up work with regard to suggesting possible new (national or EU-level) initiatives with regard to the authorisation regime for submarine connectivity, given that such suggestions may unintentionally result in creating uncertainty, or even complexifying rather than simplifying authorisation procedures, both for existing and new operators of such systems, among others.

META agreed with BEREC's scoping (i.e. preliminary conclusions in section 3.5) and appreciated BEREC's clarification of how the EECC framework applies to modern submarine deployment and operation (section 3). Meta considers that a harmonised national approach on the applicability of the EECC to the mere transit of traffic exclusively within a cable landing station, or transit backhaul services for the purposes of providing capacity to users outside the country, would be beneficial to all stakeholders and reduce complexity and uncertainty associated with submarine cable investment in European coastal countries.

META also referred that harmonisation of national legislation on rights of way and rights to install facilities as it applies to non-public and public ECN (section 3.6.2) would recognise modern deployment models (where public and non-public ECN operators collaborate in joint

development). This would reduce complexity, duplication and increase deployment speed for critical digital infrastructure.

MICROSOFT referred that it tended to agree with BEREC's position that submarine cable systems operated by content and application providers connecting their data centres qualify in general as non-public ECN.

NOKIA referred that submarine cables which are 100% owned by CAPs, as long as peering occurs on these cables to facilitate internet services and interpersonal communications services, should be subject to the same general authorisation regime under the European Electronic Communications Code (EECC).

BEREC's assessment and response

BEREC acknowledges the overall agreement with the adequacy of the general authorisation regime in the electronic communications sector and with the contents of Section 3 and reiterates that the qualification of the operation of a given submarine cable system as a public ECN and/or a publicly available ECS shall always depend on a case-by-case analysis.

4. Comments on measures to promote submarine connectivity

4.1. Legal, administrative and institutional measures

4.1.1. EU level

AWS observed that facilitating multiple landings in EU countries in strategically significant locations for new cable systems will aid efficient investment while also ensuring security of supply.

ECTA referred that given that currently existing provisions work well, a single point of contact at EU level or a single EU authorisation procedure are not necessary.

ESCA considered that such a point of contact or policy lead at EU level with specific responsibility for subsea cable policy would be highly beneficial. Such a point of contact should also participate in submarine cable forums such as the annual ICPC Plenary and the twice-yearly ESCA Plenary as well as other non-commercial events to ensure high level of knowledge and industry engagement. Furthermore, **ESCA** considered that direction across the EU on topics such as coordination of the approach to streamlined and rapid submarine cable repair activities, and taking away regulatory barriers for repair vessels to undertake repairs would be a strong measure of success of the implementation of an EU point of contact for submarine cable policy.

MICROSOFT pointed out that when it comes to the pan-European harmonisation, and specifically the idea of establishing a single point of contact at the European level, such a solution is not relevant. In practice, subsea cable landings relating to a submarine cable system seldom concern more than one country and are therefore inherently country-specific: they require maritime authorisations, sometimes national security review, negotiations with landowners on land, construction crews. Because of these particularities, subsea cable landings are intensive to the site, therefore introducing a single point of contact or a single way of doing things across the EU would not necessarily result in material improvements; on the contrary, it may create an additional layer of bureaucracy, which may prove counterproductive. Overall, Member States and their NRAs currently tend to take a reasonable, investment-friendly approach to cable landing. The EU-level harmonisation of subsea cable oversight does run the risk of increasing burdens for landing cables in some European countries, and that would both dis-serve the interest in encouraging redundancy, as well as removing the flexibility that Member States have, and should continue to have, in how best to ensure that subsea cable landings satisfy national interests.

BEREC's assessment and response

BEREC has included, in the introduction, a reference to the results of the report's public consultation and to measures valued by stakeholders, including in the field of legal, administrative and institutional measures.

4.1.2. National level

4iG considered that the harmonisation and simplification of authorisation procedures in EU Member States for the construction of submarine communications cables appears essential to meet the changing needs of both the investment environment and the European Union. The harmonisation and simplification of procedures in the Member States is a vital means to promote the competitiveness of EU market players and to improve the predictability of investments and the timely implementation of the necessary infrastructure developments, while ensuring the necessary safety aspects. Clarification and harmonisation of the rules applicable in the EU Member States are particularly important in cases where territorial jurisdiction over subsea infrastructure is unclear. In particular, regulatory harmonisation and cooperation with the non-EU countries concerned should focus on a coordinated and consistent approach to licensing, consistent information and a rapid and safe response to operational incidents.

4iG strongly supported a comprehensive reform of the authorisation procedures and the harmonisation of the procedures applied in the EU Member States to the greatest extent possible, including the introduction of a one-stop shop system in all countries, with a single point of contact for both operators and the various public authorities concerned.

AWS agreed with BEREC's assessment that the timelines related to authorisation and administrative procedures required for a new international submarine cable with a landing point, vary extensively and can exceed one year. **AWS** would welcome efforts to make these

timelines more consistent across the EU, and mechanisms to expedite the timeline to secure permits for cable route surveys, for cable installation permits and for maintenance permits.

ECTA welcomed BEREC's references to 'single point of contact' and/or 'one stop shop' procedures introduced at national level for non-electronic communications issues by some EU Member States and EEA countries, and supported the identification in the draft report of best practices at national level as regards non-electronic communications regulatory requirements. Furthermore, ECTA urged BEREC to start a dialogue, together with its constituent NRAs, with national authorities in charge of environmental protection, cultural heritage protection, maritime resources planning and management, and to explicitly add the authorities in charge of coastal areas, with a view to optimising the swift delivery of the necessary permits for submarine connectivity.

ESCA pointed that where any additional regulatory measures are proposed, they need to be done in conjunction with the industry bodies that represent submarine cables to ensure that they are implemented with full technical knowledge and understanding of national governments. In ESCA's view, participating in non-commercial industry forums assist governments to build capacity and technical understanding of the complex topics relating to subsea cables and can support the development of effective and proportionate regulation.

Furthermore, ESCA recommended that streamlining and promotion of lead personnel or departments within national governments with specific responsibility on subsea cable policy areas will be beneficial to promote deployment of such vital infrastructure and ensure that efficient and rapid repair capability is encouraged and, importantly, repairs are not hindered or delayed.

In ESCA's view, uncertain and prolonged or complex permitting processes can hinder and delay projects in many instances and factor as a potential significant disincentive for investment. With regard to the authorisations relating to environmental protection, ESCA mentioned that the impacts relating to submarine cables are by their nature small-scale, temporary and take place during installation - therefore, while Environmental Statements and reports are prepared, cables do not meet the thresholds for Environmental Impact Assessment within the regulations in Europe. However, it should be noted that rapid repair response in emergency situations is critical (e.g. when a cable is damaged by fishing activity, anchor drag, or natural hazards). Repair activities should be exempt from permitting/licensing requirements to enable it to take place within hours/days of the fault occurring – and this is the case in many countries - but specific exemptions for cable repair are recommended by the industry to ensure that this policy is explicit and is not overlapped by other policy areas (e.g. shipping, cabotage or importation policies). Finally, ESCA strongly supported the intention to streamline, improve and support better regulation, but considered vital to ensure that licensing regimes fully understand the requirements and unique characteristics of submarine cables - including the context of international law.

Finally, ESCA considered that any fees should be transparent and published clearly and it should be noted that excessive fees could be a disincentive to investment and development.

The fee structures which currently exist are generally not harmonised or directly linked to subsea cable policies.

ETNO also advocated for comprehensive reforms in the permitting procedures. This includes clear identification, simplification, and unification of the process for installation, repair, and decommissioning of submarine cables. These processes should be harmonised throughout Member States as much as possible, including the introduction of a one-stop-shop approach in every country. This centralised process would establish a single point of contact for both operators and various public agencies involved. In ETNO's view, a recent order from the Portuguese government, outlining measures to simplify the installation of submarine cables, including the establishment of a single licensing portal, sets an EU best practice.

In the brief shared by **GDIP** and supported by Meta, it is recommended that policymakers should create and maintain a transparent and stable regulatory framework and make permitting predictable and, if there are permitting fees, it should be ensured that they are reasonable and cost-based. Additionally, policymakers are recommended to adequately staff agencies and ensure employees have the requisite expertise in subsea cables, given that having an insufficient number of qualified staff available to efficiently process permits can create delays and backlogs, compromising subsea cable installations and update and revise regulatory sandboxes can provide leniency for both industry and policymakers to develop principles in coordination.

Other measures recommended include the creation of policies and processes that reflect the environmentally benign nature of subsea cables and that improve the coordination of permitting within/among various levels of government to avoid duplication, inconsistencies, and unnecessary churn.

GOOGLE appreciated BEREC's assessment of national measures to promote the development of international submarine connectivity and supported adding other measures as the establishment of simplified licensing regimes for submarine cables, creation of single points of contact for parties interested in making submarine cable investment and for cooperation between competent authorities of different countries and creation of sea and land corridors for the installation of cables.

META referred that while the application of the EECC framework to submarine communications infrastructure is generally balanced and effective, the application of any other regulatory framework creates uncertainty, inefficiency and delay. In META's view, BEREC is correct to point out that the regulatory/policy challenges that can inhibit or delay the deployment of submarine cable systems are driven by the need for compliance with a significant number of national authorisation administrative procedures in fields beyond the ECNS sector, including environmental protection, cultural heritage protection, maritime resources planning and management and urban and territory planning and management, involving a total average duration that can exceed one year.

In this sense, **GDIP** also supported a transparent and stable regulatory framework and a predictable permitting procedure.

Thus, **META** suggested that policy development in this area should focus on initiatives to create a more favourable holistic regulatory environment for submarine system deployment. For example, it would be helpful to have streamlined and harmonised regulatory and administrative processes, to eliminate duplication for systems landing in more than one EU Member State, and to modernise processes and create one-stop shops to enhance ease and speed in obtaining rights of ways, permits and authorisations.

NOKIA supported a review of the electronic communications' regulatory framework for a clear EU-wide definition of submarine cables and a harmonisation and simplification of the authorisation regimes.

BEREC's assessment and response

BEREC acknowledges the overall agreement with the complexity of administrative authorisation procedures applicable to the deployment of submarine cable systems.

BEREC has included, in the introduction, a reference to the results of the report's public consultation and to the measures valued by stakeholders, including in the field of legal, administrative and institutional measures.

4.2. Security measures

AWS welcomed the focus on increasing the cybersecurity and resilience of electronic communications networks and services and noted that harmonising security regulations at the EU level enables scalable security, given that one-off security practices introduce risks as processes are unpredictable, less mature, and security-value limited.

ECTA supported BEREC's reference to ENISA's 'good practices', notably in terms of ensuring diversity of routes and landings, to avoid single points of failure, to ensure spatial separation of submarine cable systems, and to ensure single points of contact for permitting and handling any issue arising around submarine cable installation, repair and maintenance. ECTA also referred that it would welcome and endorse an initiative of mapping of the existent submarine cable routes.

ESCA also expressed its support to the measures proposed by ENISA as good practices and referred to the ICPC Recommendations which are good practices for the industry, as well as promoting good practices for national governments on supporting and enhancing the resilience of submarine cables.

In **ETNO**'s view, to ensure the resilience and security of submarine cables, enhanced cooperation between public authorities and private entities is imperative. Collaboration

between civil and military stakeholders is also essential. Member States should be encouraged to establish a clear and structured dialogue between the private and public sectors to collaboratively safeguard the resilience of submarine cables.

In the brief shared by **GDIP** and supported by **META** it is sustained the adoption of diverse routes/landings, given that forcing multiple cables to follow the same route can lower stability and reduce reliability by inadvertently creating a potential single point of failure. Furthermore, it supported the streamline of repair processes to avoid undue delay and increase costs.

GOOGLE supported measures to (i) ensure geographic diversity of routes and landings to avoid single points of failure (which could include periodically reviewing established cable corridors to avoid over-concentration and creating new landing areas/corridors where such concentration is evident), (ii) ensure spatial separation of submarine cable systems from other maritime activities, regularly updating nautical maps and charts and designating submarine cable protection zones, to avoid cable incidents, (iii) minimize regulatory barriers to building and repairing cables, including avoiding cabotage or crewing restrictions for such activities, establishing surface surveillance of civil maritime activities and enhancing submarine surveillance, to enhance prevention and to gain threat intelligence, (iv) establish procedures for sharing threat information with allied countries also could help maximize impact, and enlist the use of AI/ML technologies to help detect potential threats to submarine cables from sea vessels in the area of underwater infrastructure.

MICROSOFT agreed that in the course of aiming for EU-level and national harmonisation, it would be sensible to explore the creation of new minimum obligations for cooperation among the Member States on physical security of cables, e.g., in close cooperation and coordination with NATO.

BEREC's assessment and response

As a prior note to this section, it must be mentioned that, on 26 February 2024, the European Commission issued the Recommendation on secure and resilient submarine cable infrastructures, which includes a list of recommendations on the subject of security and resilience and is now summarised in a new Subsection 5.1.4.

BEREC also acknowledges the overall agreement with ENISA's good practices and has included, in the introduction, a reference to the results of the report's public consultation and to the measures valued by stakeholders, including in the field of security.

4.3. Financial measures

4iG advocated a stronger focus in EU funding programmes on investment in submarine communications cables that enhance the geographical diversity of transmission routes between the EU and other global destinations.

ETNO strongly advocated for continued support from the EU's Connecting Europe Facility (CEF) Digital program to strengthen the EU's capabilities in submarine cable connectivity. The goal should be to bolster the competitiveness and relevance of European operators on strategic routes compared to non-EU investors, while adhering to CEF obligations in order to avoid diluting private investment from European operators in existing or planned infrastructure and it could also contribute to reinvesting in critical cables at the end of their lifecycle. The implementation of the Global Gateway initiative could also become an efficient lever, should relevant financial tools be developed. While operators demonstrate effective monitoring capabilities for coastal cables, their ability to monitor and repair deep-sea cables faces constraints. Therefore, CEF funding could be extended to support initiatives in this domain, helping mitigate the rising costs that operators consistently encounter, such as those associated with securing effective repair and maintenance strategies.

In the brief shared by **GDIP** and supported by Meta, it is considered that imposing restrictions on types of ownership, including capping foreign ownership or imposing onerous local partner requirements, could discourage investment in new internet infrastructure and that allowing private investors (including foreign investors) to land cables, and to invest in, own, and operate cable landing stations and carrier-neutral colocation facilities will attract investment.

GOOGLE supported the adoption of measures to ensure an open investment policy that allows, *inter alia*, submarine cable ownership and operation by foreign investors without mandatory local partnership requirements.

BEREC's assessment and response

BEREC has included, in the introduction, a reference to the results of the report's public consultation and to the measures valued by stakeholders, including in the field of financial measures.